

APPLICATION NO.

09/993,970

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

| ATTORNEY DOCKET NO. | CONFIRMATION NO | |
|---------------------|-----------------|--|
| 01-LJ-020 | 9016 | |

30428 7590 04/19/2006 STMICROELECTRONICS, INC. MAIL STATION 2346 1310 ELECTRONICS DRIVE CARROLLTON, TX 75006

FILING DATE

11/16/2001

MARIAM, DANIEL G

ART UNIT PAPER NUMBER

DATE MAILED: 04/19/2006

2624

Please find below and/or attached an Office communication concerning this application or proceeding.

FIRST NAMED INVENTOR

Peter J. McGuinness

| Supplemental | Application No. | Applicant(s) | |
|--|--|-----------------------------|--|
| Notice of Allowability | 09/993,970 Examiner | MCGUINNESS ET AL. Art Unit | |
| • | DANIEL G. MARIAM | 2624 | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. ☑ This communication is responsive to an IDS filed 10/17/05 & a tel. interv. dated 4/10/06. 2. ☑ The allowed claim(s) is/are 1-5, 7-12, 15-15-20, & 23-26 (will be renumbered as 1-21). 3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. | | | |
| 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. | | | |
| Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 10/17/05 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material | 6. ⊠ Interview Summary Paper No./Mail Dat 8), 7. ⊠ Examiner's Amendr | te <u>4/10/06</u> . | |

EXAMINER'S AMENDMENT AND REASONS FOR ALLOWANCE

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with

Jose Gutman (Reg. No. 35,171) on April 10, 2005.

The application has been amended as follows:

Cancel claims 6, 14, and 22.

Amend claim 1 as follows:

At line 24, after the limitation "correlator" insert ", and wherein each initial image

correlator computes a first likely match set of distinct image features that is determined

to have a maximum average strength of correspondence based at least in part on a total

number of matching neighbor distinct image features for each match of the first likely

match set"

Amend claim 9 as follows:

At line 18, after the limitation "correspondences" insert ", and wherein the step of

determining a first correspondence comprises the step of producing a first likely match

set of distinct image features that is determined to have a maximum average strength

of correspondence based at least in part on a total number of matching neighbor distinct

image features for each match of the first likely match set"

Art Unit: 2624

Amend claim 17 as follows:

At line 19, after the limitation "correspondences" insert ", and wherein the instructions for determining first correspondence comprise instructions for producing a first likely match set of distinct image features that is determined to have a maximum average strength of correspondence based at least in part on a total number of matching. neighbor distinct image features for each match of the first likely match set"

Reasons for Allowance

- 2. Claims 1-5, 7-12, 15-20, and 23-26 are allowed. The claims will be renumbered as 1-21.
- 3. The following is an examiner's statement of reasons for allowance: the reasons for allowance of independent claims 1, 9, and 17 presented in the last Office Action are not repeated herein, but are incorporated by reference. Additionally, the key difference between the newly surfaced prior art of Morimura, et al (5,768,404) and the claimed invention is the fact that Morimura, et al do not rely upon, among other things, wherein each initial image correlator computes a first likely match set of distinct image features that is determined to have a maximum average strength of correspondence based at least in part on a total number of matching neighbor distinct image features for each match of the first likely match set. It is for this reason and in combination with all of the other elements of the claims that claims that claims 1-5, 7-12, 15-20, and 23-24 are allowable over the prior art of Morimura, et al.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL G. MARIAM whose telephone number is 571-272-7394. The examiner can normally be reached on M-F (7:00-4:30) FIRST FRIDAY OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW BELLA can be reached on 571-272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DANIEL G MARIAM Primary Examiner Art Unit 2624

April 17, 2006